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# Navigating Ethical Cotton Sourcing: a Comparative Analysis of due Diligence Practices in the Spinning and Weaving Industries in Punjab, Pakistan

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This study aims to compare due diligence approaches in the spinning and weaving industries to assess the level of diligence applied in cotton sourcing. By adopting due diligence practices, businesses can evaluate the ethical practices of farmers and suppliers. Data was collected from industrialists through qualitative interviews conducted in the spinning and weaving industries of Punjab, Pakistan. The findings of this study indicate that 100% of industrialists claimed adherence to the Fundamental Principles of Responsible Work (FPRW) and reported no instances of child labor, discrimination, or forced labor. However, only 10% received information on their suppliers' FPRW practices at the farm level, with the majority being unaware of supplier practices regarding FPRW implementation on farms. These findings suggest that the spinning industry should develop a buyers' code of conduct to monitor supplier practices and ensure responsible sourcing.
**Keywords**: Child Labor, work force discrimination, Spinning Industry, Weaving Industry, Pakistan textile.

## INTRODUCTION

The textile industry is the second biggest industry in the world, after agriculture (Sangeetha *et al.,* 2013). The textile industry is the backbone of the Pakistani economy and plays a significant part in the country's industrial sector. There are various kinds of businesses involved in the textile value chain, making it exceptionally complex. There were 1,221 ginning units, 442 spinning units, 124 big spinning units, and 425 small units in Pakistan that produced textiles in 2013. Up to 57% of total exports may be attributed to this industry (Textile Division, 2018). The Pakistani government is dedicated to raising cotton production and growing the country's part of the global textile and apparel export market. Approximately 10 million Pakistanis, including 1.5 million farmers who cultivate cotton for the textile Industry, are employed by the textile and apparel industry, making up nearly 40% of the industrial labor force (Warner 2023; Sajjad, Eweje, and Tappin 2015). Approximately 55-60% of Pakistan's overall export value is generated by cotton and textile items (Batool and Saaed 2017) After short falling of projections in previous years, textile and apparel exports reached a record high of over US 15.4 billion Dollars in fiscal year (FY) 2021-22. 8 When it comes to global cotton production, Pakistan ranks among the top five. To help achieve its goal of "strategic,

sustainable, and responsible economic growth," the government approved the National Textile Policy (NTP) for the years 2020–2025 in December 2021. This policy emphasizes "conforming to regulatory and compliance standards, improving integration into global value chains, and implementing an E-commerce strategy" (Batool and Saaed 2017) The approval process had been slowed down in order to fix the underlying issues that led to the failure to meet previous export goals. However, in 2022, energy subsidies were reduced to comply with International Monetary Fund (IMF) loan requirements *(Sangeetha et al.,* 2013).

Cotton is a vital agricultural crop that helps millions of farmers and their families provide for their family by providing them with a steady source of income and food. Nearly 7% of all labor in developing nations is employed by it, which supports more than 250 million people globally. Having the world's sixth-largest population means that Pakistan has access to a wealth of talent. Companies don't need to go through any unique processes or spend a lot of money to find competent employees. Organizational databases often include a vast pool of potential candidates from whom to make hiring decisions (Ahmed and Sanaullah 2021). There are a lot of people looking for work in the job market. Non-skilled and semi-skilled labor is also more affordable because of the high unemployment and poverty in

the nation. To locate competent labor, businesses must ready to hunt. Respondents from almost every firm have highlighted the ongoing challenge of finding qualified labor. In addition to human rights violations including forced labor and unsafe working conditions, cotton plantations also have a lot of the following: (Voora *et al.,* 2023; Mehwish and Mustafa 2016). (As a result, businesses in the cotton textile industry may need to gather information on these concerns so that they may report on their activities in line with the forthcoming Sustainability Reporting Standards (Desore and Narula 2018).

Child labor has long been an issue in Pakistan's cotton and textile sectors, stemming from early reliance on children as factory workers when skilled adult labor was scarce (Galbi, 1997). Although the industry has expanded and child labor decreased, consumer concerns persist, fueled by protests and boycotts in Western markets (Khan, 2011). Existing perspectives often view child labor as resulting from poverty, lack of education, and parental attitudes (Ahmad and Kalim, 2013). However, the current neoliberal global economic system also provides crucial context (Khan, 1998). Labor standards and trade priorities are contested between Pakistan and Western partners (International Labor Organization, 2017). This study aims to examine the nuances of child labor and responsible sourcing issues in Pakistan's contemporary cotton industry, taking into account systemic factors driving practices on the ground. The problem is a lack of holistic understanding of drivers of child labor and barriers to responsible cotton sourcing faced by suppliers and factories under complex global supply chains. This research will clarify remaining child labor issues and the real-world challenges to aligning policy and practice to inform ethical yet pragmatic solutions.

### Research question:
- what is the cause behind child labor and discrimination at work place?

### Research objectives:
This study has following research objectives;
1. Assess the current state of child labor in Pakistan's spinning and weaving industry.
2. Examine discrimination faced by workers, especially women, in cotton supply chains.
3. Determine the effectiveness of supplier practices in addressing child labor and discrimination.

**Problem Statement:** Child labor and discrimination remain ongoing concerns in Pakistan's textile industry despite increasing policy focus, driven by weakly enforced regulation and lack of commitment to addressing systemic issues (Khan et al., 2019). Pakistan faces challenges as a developing economy with a growing problem of underage workers in cotton production and a male-dominated culture in textile factories that enables prejudice (ILO 2020). This research aims to clarify the nuanced factors driving child labor,

discrimination, and forced labor in Pakistan's contemporary cotton sector. By examining gaps between policy and practice through interviews with spinning and weaving industrialists in Punjab, it will delineate real-world barriers faced by suppliers and factories. Findings can inform targeted recommendations to improve due diligence across supply chains via transparent monitoring and accountability mechanisms. This will support ethical and evidence-based policymaking to pragmatically combat child labor and discrimination while retaining competitiveness.

***Discrimination:*** Women and girls in underdeveloped nations like Pakistan contribute substantially to the labor input to most elements of the cotton production cycle, either as unpaid 'family labor' or low-paid day-labor, and often undertaking some of the most demanding duties. Respondents said they take several precautions to guarantee the rights of women and noted that these steps are a precondition of the ISO 14001, Warp, and Oeko-Tex standards. Yet there was no observed effect on export sales or volume (Iqbal, 2009). Similarly, women have a hard time securing input credit facility, mainly because males are more likely to hold the collateral assets needed to get a loan (Usher 2006).

***Child Labor:*** It is estimated that almost 112 million children, or 70% of all child workers across all economic sectors, are employed in agriculture across the world. More than 75% of all kids in child labor between the ages of 5 and 11 work in agriculture(ILO 2020). In a similar vein, the US Department of Labor 2020 estimates that 70% of Pakistan's 2.26 million child workers aged 10-14 work in agriculture, with rates of child labor being higher in cotton producing districts. Twelve percent of kids aged five to fourteen in Punjab province have jobs, whereas twenty-one percent of kids in Sindh province do. Child labour rates, school closures, and the unemployment of main breadwinners are all linked in recent research, indicating that COVID-19 may have contributed to recent increases in these factors (Rivera and Castro 2021). Due to its high fertility rate (expected at 3.5 in 2022), Pakistan has one of the world's youngest populations, with 40.3% of its people under the age of 15 and a median age of 19 in 2017. According to a 2019 estimate, Pakistan was home to 92,543,258 people younger than 18 years old (Shabbir *et al.,* 2020). On Pakistani farms, families often pick cotton together because they are paid a flat rate regardless of how many people labor for them rather than a piece fee based on each person's production. It is more difficult to determine the prevalence of this situation and its impact on children's education in places where it is in place. In the eyes of the farmers, children are not a desirable labor force since they are more likely to do harm to the cotton (ILO 2020). Some of the worst working conditions for children can be found in the cotton industry, where they may be subjected to bonded labor, physical abuse, and sexual exploitation, as well as the use and application of pesticides and other hazardous chemicals and the carrying of heavy amounts of water and cotton (Ahmed and Sanaullah 2021). In

Pakistan, more men, women, and children than ever before are actively involved in the cottonseed industry.
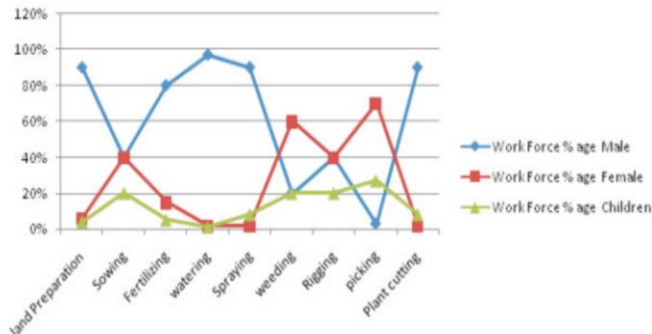


Past research reveals considerable gaps in due diligence processes to ensure responsible sourcing and social compliance across textile and apparel supply chains. Studies have found limited transparency and risk assessment beyond tier 1 suppliers (Awan *et al.,* 2020), with inadequate auditing and monitoring below first-tier firms (Perry and Towers 2013). Significant issues persist in detecting and remediating child labor (Egels-Zandén 2014) and forced labor (Ruwanpura 2016). Due diligence shortcomings stem from insufficient pre-supplier assessments (Aridov et al. 2014), variability in supply chain certification programs and lack of integrated systems to verify code of conduct implementation (Soundararajan and Brammer 2018). These studies collectively highlight the complexity of monitoring across multiple tiers and the need for more holistic due diligence to improve supply chain transparency and accountability from raw materials to finished products (Awaysheh and Klassen 2010; Wilhelm *et al.,* 2016).

## METHODOLOGY

*Research Design***:** This study utilized a convergent mixed methods approach to examine the research problem from multiple angles. The quantitative component involved structured interviews, while the qualitative component used semi-structured interviews. This descriptive research design enabled a comprehensive understanding of the issues.

*Sample and Setting***:** The study focused on the spinning and weaving industry in Pakistan, known for cotton production globally. A preliminary survey of 37 ginning and spinning organizations informed understanding of production, labor practices and supply chains. The sample included 95 workers from 37 purposively selected ginning and spinning firms in four Punjab districts.

*Data Collection Instruments***:** Quantitative data was gathered via interview schedules to assess worker profiles, health, safety, preparation for hazards, and related factors. Qualitative data was gathered using interview guides focused on child labor, discrimination, forced labor, and due diligence in cotton sourcing.

*Data Collection Procedures***:** The Ministry of Textiles identified high production ginning and spinning plants. Interviews were conducted from December 2022 to February 2023 with 95 workers from the 37 selected firms.

*Ethical consideration***:** This study obtained informed consent from all participants and maintained anonymity through de-identified data. Confidentiality protocols were followed with data access restricted to the research team. However, some limitations arise from the qualitative methods and purposive sampling. The small sample sizes from each factory limit representation of all workers. Social desirability bias may have influenced self-reported practices without secondary documentation. Furthermore, the regional concentration in Punjab restricts national generalization. Language barriers likely inhibited probing with some participants. Future research should employ mixed methods using larger, randomized samples across multiple regions of Pakistan. Triangulating self-reported practices with observational and secondary data would also improve validity. Despite limitations, the in-depth insights derived ethnically provide a meaningful perspective into responsible sourcing practices and due diligence processes.

**Table 1. Number of Organization from different district**

| District | No. of ginning gactories | No. of spinning Factories | Contract basis |
|---|---|---|---|
| Bahawalpur | 10 | 9 | 24 |
| Faisalabad | 9 | 9 | 21 |
| Lahore | 8 | 9 | 23 |
| Multan | 10 | 10 | 27 |

**Table 2. Respondents Social Profile**

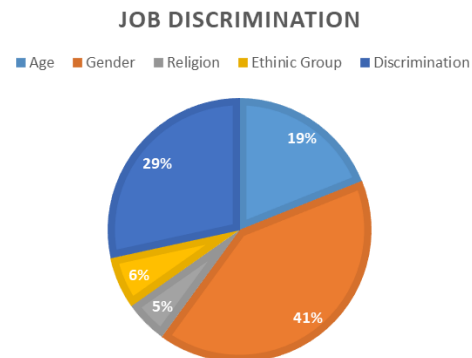| District | Male | Female | Married | Average age | Family size |
|---|---|---|---|---|---|
| Bahawalpur | 11 | 13 | 45.0% | 27 | 6 |
| Faisalabad | 10 | 11 | 55.0% | 25 | 5 |
| Lahore | 11 | 12 | 61.3% | 29 | 4 |
| Multan | 15 | 12 | 57.0% | 31 | 5 |



**Figure 2. Job discrimination**

When asked form the spinning organizations manager about the child labor, force labor and discrimination practices involve in ginning sector. Most of the organizations respond that 80% suppliers report that no child labor, and discriminations practices used in ginning sector. When we asked questions from weaving organizations, they also respond like that there were no such practices have been used. But when employees were interviewed and asked questions about child labor, force labor and discrimination, we found that their child labor, discrimination, and force labor have been practices in the upstream supply chain. Because businesses, merchants, and especially retailers fail to conduct thorough supplier audits, demand transparency, and monitor their supply chains, goods created with child labor, forced labor, and discrimination are able to penetrate the major western consumer markets with ease. When traditional cotton leaves the field, it travels through numerous hands before reaching the final customer, but the supply chain is often opaque, giving suppliers and retailers with an easy out. They may avoid directly obtaining confirmation that their goods are free of child labor (or other abuses) by hiding behind a "complex supply chain," preventing customers from being able to make better informed decisions.

***Discrimination*:** When these ginning and spinning factories were questioned about their workers' rights, the stated response rate was one hundred percent. The majority of respondents (65%) said their organizations had a dedicated HR department where workers' records are kept and annual performance reviews are conducted. The respondents also apparently have access to a variety of amenities including a welfare office, child care centers, maternity leave programs, etc. However, there was no documented effect on the textile units' trade volume or profits from such methods. When asked about acting responsibly toward others, all respondents gave favorable ratings. When questioned about the status of women in the units studied, all responses were favorable. Considering that the majority of ginning and spinning sector employees are women, it is essential that their rights be respected in order to demonstrate conformity with international conventions.

***Child Labor*:** Each of the seventy-five respondents demonstrated compliance with child labor regulations and claimed that they never use minors for industrial work (Ahmad and Kalim 2013). Compliance with child labor regulations has no appreciable beneficial effect on trade volume or profit from international commerce, despite the fact that failure to do so has a negative influence on any organization's image (Ali and Jadoon 2012).

***Qualitative Data Analysis*:** *There* are several factors that impact child labor and discrimination at work.

***Poverty as Root Cause*:** According to the study's findings, poverty is one of the primary socioeconomic variables that contribute to the prevalence of child labor. All of a kid's life choices, including those regarding education and child labor, are typically determined by their parents in Pakistan. When a family is living below the poverty line, children are considered to be an asset to the household. Education might be out of reach for low-income families. The research concludes that the greatest strategy to eliminate child labor is to focus on alleviating poverty.

***Size of Family*:** According to the findings, the threat of child labor and force labor is exacerbated by big family sizes. Child labor is more common among children from big, low-income families. Families with children in poverty tend to be tiny. Because it is difficult for the only income earner of a big, impoverished family to meet the basic needs of his or her family members. There is no need that all children under the age of 14 and females in a big home be employed. Gender inequalities in child labor are also seen, with males having more access to educational opportunities than girls. Regardless of gender, age is a factor, such as when older siblings are more likely to pitch in financially. Recent research indicated that girls in the family are more likely to be subjected to child labor than boys since the economic load of the household rests disproportionately on the shoulders of the oldest children.

***Culture*:** According to the current research, culture serves as a motivating element for youngsters to enter the labor market. Work at a young age is commonplace in several segments of Pakistani society. In the workplace, women experience the same low wages as men. Getting experience in any kind of manual labor at a young age is seen as beneficial because of the expectation that it will help provide for the family's financial needs in the future. Many families across cultures want their kids to start working as soon as possible in specialized labor. women have a lower chance of getting a degree and a higher likelihood of working to support their children. Women are more likely to accept lower pay rates than men.

***Corruption*:** In this study, researchers discovered that "corruption" is a significant contributor to the problem of child labor and discrimination in cotton industry. It was widely agreed upon among respondents that economic hardship follows instances of societal corruption. Corruption amongst government officials stunts a country's economic development, and it particularly harms children's rights and female rights access to essential services (healthcare, infrastructure and education). As a result, children who work have less of a chance of breaking out of poverty. Increases in the number of minors working for low salaries are mostly attributable to the widespread corruption among labor inspectors.

## DISCUSSION AND CONCLUSION

The purpose of this research is to improve efforts to eliminate child labor, forced labor, and other forms of exploitation in Pakistan's cotton supply chain via transparency and accountability by tracing their origins (Ahmed and Sanaullah

2021). Businesses were prompted to think about and take action to prevent discrimination and end child labor as a result of rising social and environmental consciousness (Bhandari 2021). Government agencies have also begun to address the difficulties women encounter in the workplace as a result of the gender gap (Begum Sadaquat and Sheikh 2011). It is crucial to identify the labor-related hazards, especially those associated with child and forced labor, and to map the contours of the Pakistan cotton supply chain in order to create and apply traceability solutions efficiently (Rinaldi et al. 2022). It is also important to be familiar with the broad strokes of the Pakistani cotton economy, legislation, and policy, as well as the country's labor laws and administration, in especially as they relate to the decentralization of authority at the provincial level (Ul-Haq, Khanum, and Raza Cheema 2020). Understanding the presence of child and forced labor as well as the participation of stakeholders in government, worker and employer groups, and NGOs is essential (ILO 2020). The Report is just a snapshot of a constantly changing world; it will be necessary to reassess the facts and conditions on a regular basis to make sure that due diligence is relevant and successful, with traceability as one crucial part of such efforts (Ahmed *et al.,* 1999). Child labor, forced labor, discrimination, and other harmful behaviors may be tracked and reduced in global supply chains with the use of the Project's experimental traceability tool (Khan 2011). As a result, men outnumber women in the industry, and this is mostly due to the fact that women are understandably hesitant to enter a male-dominated field where the language and conduct of seniors may not be conducive to a productive work environment for them (Begum Sadaquat and Sheikh 2011). Present conditions reveal a slumbering training scene brought on by the industry's financial downturn. Customers expect businesses to meet their high standards in a variety of areas, including the payment of a living wage to workers, adherence to laws protecting children at work, the elimination of unnecessary overtime for employees, and the maintenance of high-quality standards throughout the organization (Shabbir *et al.,* 2020). Also, consumers depend on businesses to set up secondary facilities in other countries to safeguard against supply delays and subpar products (Sajjad, Eweje, and Tappin 2015). To ensure the long-term viability of such initiatives, it is crucial to involve a diverse range of stakeholders from the mining industry and beyond, including the business community, the financial sector, government, international organizations, and civil society (including labor unions and nongovernmental organizations).

The research undertaken aimed at enhancing efforts to eradicate child labor, forced labor, and exploitation within Pakistan's cotton supply chain through transparency and accountability measures. Key findings highlighted the necessity of tracing the origins of labor-related hazards, particularly those linked to child and forced labor, and mapping the contours of the supply chain. The involvement of various stakeholders, including businesses, government agencies, NGOs, and international organizations, was emphasized as essential for effective intervention. The study underscored the importance of understanding the broader context of Pakistan's cotton economy, legislation, and labor laws, particularly in relation to decentralized authority at the provincial level. It also addressed gender disparities within the industry, noting the predominance of men and the barriers preventing women's participation due to workplace culture and conduct issues. Implications of the research suggest the need for ongoing vigilance and reassessment of labor practices, given the dynamic nature of the industry. The development and implementation of traceability solutions, alongside broader stakeholder engagement, emerged as crucial strategies for addressing labor-related challenges. Moreover, the study emphasized the growing expectations from consumers for businesses to uphold ethical standards, including the payment of living wages, compliance with child labor laws, and maintaining product quality. The role of businesses in establishing secondary facilities in other countries to mitigate supply chain risks was also highlighted. In conclusion, the research underscores the urgency of addressing labor exploitation in the cotton supply chain and the importance of collaborative efforts involving various stakeholders to achieve meaningful change. By prioritizing transparency, accountability, and ethical practices, the industry can work towards a more sustainable and equitable future for all workers involved.

***Limitation and future direction***: Time and money are two of the common obstacles on research like this. The data collecting process went through many stages, but each one was handled delicately. However, more than half of the surveys encountered delays, with the primary contact experiencing long wait times and, in a small number of instances, being forced to reschedule appointments. Time and cost restrictions were two barriers that hindered the study's ability to collect data from workers. For businesses that want to eliminate child labor, forced labor, and discriminatory practices from the global value chain, the report suggests that politicians create a complete policy and regulatory package. More importantly, the analysis confirms the need for a unified and comprehensive set of codes, such as the one proposed here. This study also suggests that, in order to achieve collaborative sustainable progress, people need take concerted action to protect the environment and the dignity of all people. The potential exists to expand this work into a case study format to investigate the quantitative effects of these GPE's adoption and implementation by Pakistani textile firms on trade volume, export profit, environmental impact, and social corporate responsibility. Additionally, the idea

presented below for textile units might be applied to other economic sectors in future research.

*Ethical statement*: This article does not contain any studies regarding human or Animal.

*Availability of data and material*: We affirm that the manuscript we have submitted is original, has not been previously published, and is not under consideration for publication elsewhere.

*Code Availability: N/A*

*Consent to participate*: Every author actively contributed to this research study.

*Consent for publication*: Each author has provided consent for the publication of this research article in JESD.

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